

REMARKS/ARGUMENTS

The Status of the Claims.

Claims 1 and 17 to 20 are pending with entry of this amendment, claims 2 to 16, and claims 21 to 26 being previously cancelled. Claims 1 and 20 are amended herein. These amendments introduce no new matter and support is replete throughout the specification. These amendments are made without prejudice and are not to be construed as abandonment of the previously claimed subject matter or agreement with any objection or rejection of record.

With respect to claim 1, support for the amendments can be found throughout the specification. For example, support for direct bonding of fluorescent moieties to structure I through an O, S or N, see the abstract; Figures 7 and 8; and, paragraphs 48 to 56. Support for bonding of the fluorescent moieties to structure II can be found, e.g., at Figures 2, 5, 6; and, paragraphs 48 to 56. Support for C-O, C-N and C-S linkers can be found, e.g., in paragraph 50 and in the original claims. Support for the O, N or S further bonded through a single bond to an aromatic structure of the fluorescent moiety can be found, e.g., in Figures 1 to 8; paragraphs 48 to 56; and the original claims.

With regard to claim 20, the amendment is merely to correct a typographical error to provide proper antecedence.

Applicants submit that no new matter has been added to the application by way of the above Amendment. Accordingly, entry of the Amendment is respectfully requested.

Interview Summary.

The Examiner graciously agreed to an interview after final in this case. On June 6, 2007, Applicants representative called Examiner Berch. The discussion focused on enablement and description issues around independent claim 1.

Applicant's representative noted that several claims have been found allowable in the case and the Applicant would like to work with the Examiner to determine

mutually agreeable changes to make claim 1 allowable also.

Applicant had previously faxed proposed claim 1 amendments to the Examiner in preparation for the interview. The examiner found the proposed amendment would overcome the indefiniteness rejection at the top of page 2 in the Action.

Applicant's representative further offered that, with regard to the enablement rejection at page 4 of the Action, the leaving group chemistries should be highly facilitated by the presence of resonant structures to the left of the O (phenolic ether linkage), S or N; as shown in the specification. The Examiner suggested that limitation of the "Z" groups to having structures of this nature could overcome the enablement issues at page 4.

Examiner Berch asserted that a written description issue, as described at the bottom of page 3 in the Action, remained where Z is allowed to have no linker in the second structural formula. Applicant's representative suggested the claim could be limited to the presence of a linker with regard to the second structure, if this could resolve the remaining issue.

35 U.S.C. §112, Second Paragraph.

Claims 1 and 18 were rejected under 35 U.S.C. §112, second paragraph, as allegedly indefinite because of confusion as to what "Z" comprises.

In order to allay this confusion, Applicants have amended independent claim 1 to make it clear that with regard to the second (double bonded) structure, the "Z" fluorescent moiety comprises a linker.

With this issue addressed, as suggested by the Examiner, Applicants respectfully request withdrawal of the rejection.

35 U.S.C. §112, First Paragraph.

Claims 1, 18 and 20 were rejected under 35 U.S.C. §112, first paragraph, for alleged failure to comply with the written description requirement with regard to possible reading of structure II to include embodiments without a linker.

Applicants have amended independent claim 1 to clarify that with regard to the second (double bonded) structure, the "Z" fluorescent moiety comprises a linker.

With this issue addressed, as suggested by the Examiner, Applicants respectfully request withdrawal of the rejection.

Claims 1, 18 and 20 were rejected under 35 U.S.C. §112, first paragraph, for alleged failure to comply with the enablement requirement with regard to the nature of leaving groups.

Figures 2 and 8, with support from paragraphs 42 and 50, demonstrate enablement of the claims, as currently amended. When a lactam is enzymatically attacked by a lactamase, a series of electron transfers is initiated, as described in the diagram and text of paragraph 42. The electron transfer can continue directly to a leaving O, S or N single bonded to a resonant structure (such as aromatic structures of fluorophores), as shown in Figure 8 and supported by paragraph 50 and the structures of the original claims. Alternately, the electron transfer from the cleaved lactam can propagate through a double bond and single bond to a leaving O, S or N single bonded to a resonant structure (such as aromatic structures of fluorophores), as shown in Figure 2 and supported by paragraph 50 and the structures of the original claims.

These structures, taken from embodiments presented in the original specification, are reflected in amendments to independent claim 1. The present amendments require the "Z" structure to be directly bonded to the single bonded structure I; and, require the "Z" structure to be bonded to the double bonded structure II through C-O, C-N or C-S linkers (of paragraph 50). In each case, the function of the fluorescent moiety leaving group is facilitated by provision of a single bond on the right of the O, S or N to an aromatic group, as in various described embodiments.

Because the functional leaving groups of the amended claims are described at length in the original specification, Applicants respectfully request withdrawal of the rejections for alleged lack of enablement.

Allowable Claims

Applicants appreciate that claim 17 has been allowed.

Claim 19 has been objected to as dependent upon a rejected claim, and deemed allowable if it were amended to include all limitations of the base claim. However,

as Applicants believe base claim 1, as currently amended, is in condition for allowance, Applicants have elected to retain claim 19 in dependent form.

CONCLUSION

In view of the foregoing, Applicants believes all claims now pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

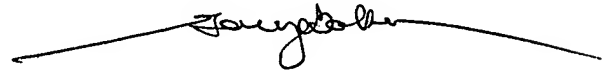
Applicant's representative has amended the present claims to provide allowable claims based on his understanding of the phone interview discussion of June 6, 2007. If issues remain, Applicant would consider Examiner's amendments to provide allowance. If the claims are deemed not to be in condition for allowance after consideration of this Response, a telephone interview with the Examiner is hereby requested.

LAW GROUP

QUINE INTELLECTUAL PROPERTY

P.O. BOX 458,
Alameda, CA 94501
Tel: 510 769-3510
Fax: 510 337-7877
PTO Customer No.: **22798**
Deposit Account No.: **50-0893**

Respectfully submitted,



Gary Baker
Reg. No: 41,595

Attachments:

- 1) A transmittal sheet; and,
- 2) A receipt indication postcard.